



Application Number 10/823,847

Claim listing:

Claim 1 (currently amended)

Claim 2 (canceled)

Claim number 1 (Currently amended): (Mike 8001 induction motor design)

What I claim as my invention is shown as Fig. 4 (Mike 8001 induction motor design), a new structure of the hermetic (or semi hermetic) refrigeration (or a/c) system. In this new design, the motor stator electrical winding and the stator body are left outside the dome. Rotor and compressor stay inside the dome; stator poles go through the dome to face the rotor directly (as shown in FIG.4-5). -The distance between stator pole and rotor is the same as before, motor efficiency is the same as before. Those connections between dome and stator poles are sealed; most likely they are welded together. -The material of the part - of the dome, - where the dome gets stator poles go through, - should be - nonmagnetic (or diamagnetic) material; so the magnetic flux pattern in the stator - - will stay the same, motor will function the same as before. The gaps between the - stator laminated pieces should be sealed; most likely they are welded together to - prevent the leak of the high pressure refrigerant. This new design makes the - dome a completely sealed space, no opening for electrical entrance, - no - possibility to leak refrigerant, - no possibility to cause environmental pollution. -The short circuit of the stator electrical winding will not burn the refrigerant. -The troublesome stator electrical winding has been left outside the dome so we also -

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~~can increase the system safety, durability, and reliability.~~

Claim 2 (canceled): (Mike 8002 stator design)